

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0123781; AI140038; PER20060001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** J.S. Kan-Co, Inc.
Waterland USA
4774 Hwy. 311
Houma, LA 70360

- II. **PREPARED BY:** Darlene Bernard

DATE PREPARED: May 29, 2009

- III. **PERMIT ACTION:** Initial issuance LPDES permit LA0123781, AI140038
LPDES application received: October 11, 2006

- IV. **FACILITY INFORMATION:**
 - A. The application is for the discharge of treated sanitary wastewater and filter back-flush wastewater from an existing privately owned treatment facility serving Waterland USA Amusement Park.

 - B. The permit application does not indicate the receipt of industrial wastewater.

 - C. The facility is located at 4774 Hwy. 311 in Houma, Terrebonne Parish.

 - D. The treatment facility consists of a mechanical STP with aeration for sanitary discharge and solids removal for filter back-flush discharge. Disinfection is by chlorination.

 - E. Outfall 001

Discharge Location:	Latitude 29°36'04" North Longitude 90°45'45" West
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Description:	treated sanitary wastewater and food service wastewater
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Expected Flow:	122 visitors/day x 10 GPD = 1220 GPD
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Type of Flow Measurement which the facility is currently using:	Estimated
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Outfall 002

Discharge Location: Latitude 29°36'04" North
 Longitude 90°45'45" West

Description: Filter Back-Flush Wastewater and water from off season
 pool draining, from Yellow Duck Pool

Expected Flow: Filter Back-flush – 125 GPD
 Pool Draining – 71,500 gallons drained over 1 or 2 days

Type of Flow Measurement, which the facility is currently using:
 Estimated

Outfall 003

Discharge Location: Latitude 29°36'04" North
 Longitude 90°45'45" West

Description: Filter Back-Flush Wastewater and water from off season
 pool draining, from Sonic Chute Ride

Expected Flow: Filter Back-flush – 125 GPD
 Pool Draining – 71,500 gallons drained over 1 or 2 days

Type of Flow Measurement, which the facility is currently using:
 Estimated

Outfall 004

Discharge Location: Latitude 29°36'04" North
 Longitude 90°45'45" West

Description: Filter Back-Flush Wastewater and water from off season
 pool draining, from Magic Wave and Lazy River Rides

Expected Flow: Filter Back-flush – 125 GPD
 Pool Draining – 71,500 gallons drained over 1 or 2 days

Type of Flow Measurement, which the facility is currently using:
 Estimated

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Outfall 005

Discharge Location: Latitude 29°36'04" North
 Longitude 90°45'45" West

Description: Filter Back-Flush Wastewater and water from off season pool draining, from Blue Runner Slide

Expected Flow: Filter Back-flush – 125 GPD
 Pool Draining – 71,500 gallons drained over 1 or 2 days

Type of Flow Measurement, which the facility is currently using:
 Estimated

V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into Little Bayou Black, thence into the Houma Canal, thence into the Intracoastal Waterway in segment 120301 of the Terrebonne Basin. Segment 120301 of the Terrebonne Basin is listed as impaired for Nutrients (Nitrite + Nitrate as N), Organic enrichment/low DO, Phosphorus, and Fecal Coliform. There is a TMDL that was finalized on April 15, 2008. This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the declaratory ruling issued by Secretary Givens in response to the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Limits were set according to this TMDL. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as required.

Organic Enrichment/Low DO, Nutrients (Nitrate + Nitrite as N) and Phosphorus

To protect against the potential for oxygen-consuming pollutants that could cause instream DO problems and to protect against high levels of organic materials and nutrients, BOD₅ limitations have been established in this permit. The Bayou Terrebonne watershed TMDL for oxygen demanding substances allowed similar size dischargers secondary limits.

Fecal Coliform

To protect against the potential of high levels of pathogenic organisms, fecal coliform limitations have been established in the permit.

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The designated uses and degree of support for Segment 120301 of the Terrebonne Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 120301	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supporting	Full	Not Supporting	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 120301 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120301 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish & Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

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VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

The public notice is published in a local paper of general circulation and the Office of Environmental Services Public Notice Mailing List.

For additional information contact:

Darlene Bernard
Permits Division
Department of Environmental Quality
Office of Environmental Services
PO Box 4313
Baton Rouge, LA 70821-4313

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IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001 – Sanitary Wastewater and Food Service Wastewater

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
BOD ₅	N/A	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size and similar size facilities in the Bayou Terrebonne TMDL.
TSS	N/A	30 mg/l	45 mg/l	Since there are no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Oil and Grease	N/A	---	15 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the

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water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

OUTFALL 002 – Filter Back-Flush Wastewater and Pool Water Draining

Excess pool water will consist of the draining of Yellow Duck Pool at the end of the Season, approximately 71,500 gallons drained over 1 or 2 days.

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
TOC	N/A	---	50 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.
Oil and Grease	N/A	---	15 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. The outfall can discharge pool overflow or water from pool draining which can contain bacteria. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that

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existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

In accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

Since chlorination is used in swimming pools to eliminate or reduce bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored weekly by grab sample.

OUTFALL 003 – Filter Back-Flush Wastewater and Pool Water Draining

Excess pool water will consist of the draining of Sonic Chute at the end of the Season, approximately 71,500 gallons drained over 1 or 2 days.

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
TOC	N/A	---	50 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.
Oil and Grease	N/A	---	15 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. The outfall can discharge pool overflow or water

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from pool draining which can contain bacteria. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

In accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

Since chlorination is used in swimming pools to eliminate or reduce bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored weekly by grab sample.

OUTFALL 004 – Filter Back-Flush Wastewater and Pool Water Draining

Excess pool water will consist of the draining of Magic Wave and Lazy River at the end of the Season, approximately 71,500 gallons drained over 1 or 2 days.

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
TOC	N/A	---	50 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.
Oil and Grease	N/A	---	15 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.

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Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. The outfall can discharge pool overflow or water from pool draining which can contain bacteria. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

In accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

Since chlorination is used in swimming pools to eliminate or reduce bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored 1/3 months by grab sample.

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OUTFALL 005 – Filter Back-Flush Wastewater and Pool Water Draining

Excess pool water will consist of the draining of Blue Runner Slide at the end of The Season, approximately 71,500 gallons drained over 1 or 2 days.

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
TOC	N/A	---	50 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.
Oil and Grease	N/A	---	15 mg/l	Limits are established through Best Professional Judgment and permits of similar discharges.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. The outfall can discharge pool overflow or water from pool draining which can contain bacteria. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

In accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

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4) **Total Residual Chlorine**

Since chlorination is used in swimming pools to eliminate or reduce bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored weekly by grab sample.

X. **ENFORCEMENT AND SURVEILLANCE ACTIONS:**

A) **Inspections**

A review of EDMS indicates the following inspection conducted at the facility:

Date – June 13, 2006

Findings and/or Violations:

An Inspection was conducted in response to a complaint. The facility is a water park with discharges from a STP and four backwash discharges for pool filters. The facility is operating without any discharge permits. The facility is being referred to SBAP. SBAP must be contacted by 06/16/06.

B) **Compliance and/or Administrative Orders**

A review of EDMS revealed that there are no recent enforcement actions administered against this facility.

C) **DMR Review**

A review of EDMS revealed that there are no DMR's on file for this facility.

XI. **ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

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In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and CD); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. Require reassessment due to change in 303(d) status of waterbody; or
4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are the same as similar permits.

XII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in this Statement of Basis.

XIII. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

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Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17,
United States Department of the Interior, Geological Survey, 1989.

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October 11, 2006.